Case 19: Determining the Cost of Capital

The Oceanic Corporation, a Chesapeake, VA based company, was established in 1994. Glenn Rodgers III founded the corporation, which was privately owned at the time, after his retirement from Norentech Corporation. The Oceanic Corporation was originally formed to provide ship repair services and quickly earned a Department of Defense (DOD) certified Alteration Boat Repair (ABR) designation. Among its specialties were structural welding, piping system installation and repairs, electrical, painting, rigging, machinery and dry-dock work, as well as custom sheet metal fabrication. Other divisions of The Oceanic included Habitability Installation, Industrial Contracting, and Alteration/Installation Teams (AIT). With its initial success and good return on investment the firm opened and operated facilities in California, New Jersey, Florida, Maryland, Pennsylvania and Washington.

In 1998, the company went public and its initial public offering was very successful. The stock price had risen from its initial value of $10 to its current level of $35 per share. There were currently 5 million shares outstanding. In 1999, the company issued 30-year bonds at par, with a face value of $1000 and a coupon rate of 10% per year, and managed to raise $40 million for expansion. Currently, the AA-rated bonds had 25 years left until maturity and were being quoted at 91.5% of par.

Over the past year, The Oceanic Corporation utilized a new method for fabricating composite materials that the firm’s engineers had developed. In June of last year, management established the Advanced Materials Group (AM Group), which was dedicated to pursuing this technology. The firm recruited Larry Stone, a senior engineer, to head the AM Group. Larry also had an MBA from a prestigious university under his belt. Upon joining Oceanic, Larry realized that most projects were being approved on a “gut feel” approach. There were no formal acceptance criteria in place. Up until then, the company had been lucky in that most of its projects had been well selected and it had benefited from good relationships with clients and suppliers. “This has to change,” said Larry to his assistant Stephanie, “we can’t possibly be this lucky forever. We need to calculate the firm’s hurdle rate and use it in future.”

Stephanie Phillips, who had great admiration for her boss, replied, “Yes, Larry, why don’t I crunch out the numbers and give them to you within the next couple of days?” “That sounds great, Stephanie,” said Larry. “My years of experience tell me that when it comes to the hurdle rate for new projects, one size hardly ever fits all!”

As Stephanie began looking at the financial statements, she realized that she was going to have to make some assumptions. First, she assumed that new debt would cost about the same as the yield on outstanding debt and would have the same rating. Second, she assumed that the firm would continue raising capital for future projects by using the same target proportions as determined by the book values of debt and equity (see Table 1 for recent balance sheet). Third, she assumed that the equity beta (1.5) would be the same for all the divisions. Fourth, she assumed that the growth rates of earnings and dividends would continue at their historical rate (see Table 2 for earnings and dividend history). Fifth, she assumed that the corporate tax rate would be 34%, and finally, she assumed that the flotation cost for debt would be 5% of the issue

price and that for equity would be 10% of selling price. The 1-year Treasury bill yield was 4% and the expected rate of return on the market portfolio was 10%.

**Table 1**

**The Oceanic Corporation**

**Balance Sheet**

***('000s)***

Cash 5000

Accounts Receivables 10000

Inventory 20000

Total Current Assets 35000

Land & Buildings (net) 43000

Plant and Equipment (net) 45000

Total Fixed Assets 88000

Total Assets 123000

Accounts Payable 8000

Accruals 5000

Notes Payable 10000

Total Current Liabilities 23000

Long-term debt 40000

Retained Earnings 10000

Common stock

(5 million shares outstanding) 50000

Total liabilities and shareholders' equity 123000

**Table 2**

**The Oceanic Corporation**

**Sales, Earnings, and Dividend History**

***('000s)***

**Year Sales Earnings per Share Dividends per Share**

1998 $24,000,000 $ 0.48 $ 0.10

1999 28,800,000 0.58 0.12

2000 36,000,000 0.72 0.15

2001 45,000,000 0.86 0.18

2002 51,750,000 0.96 0.20

2003 62,100,000 1.06 0.22

2004 74,520,000 1.20 0.25

**Questions:**

1. Why do you think Larry Stone wants to estimate the firm’s hurdle rate? Is it justifiable to use the firm’s weighted average cost of capital as the divisional cost of capital? Please explain.

2. How should Stephanie go about figuring out the cost of debt? Calculate the firm’s cost of debt.

3. Comment on Stephanie’s assumptions as stated in the case. How realistic are they?

4. Why is there a cost associated with a firm’s retained earnings?

5. How can Stephanie estimate the firm’s cost of retained earnings? Should it be adjusted for taxes? Please explain.

6. Calculate the firm’s average cost of retained earnings.

7. Can flotation costs be ignored in the analysis? Explain.

8. How should Stephanie calculate the firm’s hurdle rate? Calculate it and explain the various steps.

9. Can Larry assume that the hurdle rate calculated by Stephanie would remain constant? Please explain.